

Notice of Allowability

Application No.

09/981,221

Examiner

Callie E. Shosho

Applicant(s)

PURBRICK ET AL.

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 7/30/04 and telephonic interviews conducted on 8/18/04 and 8/19/04.
2. ☒ The allowed claim(s) is/are 1-6,8,9,12-15 and 17.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 8/19/04.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Callie E. Shosho
Primary Examiner
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Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

(1) Claim 1, line 9, after "agent" and before "with", delete "are capable of reacting" and insert "react".

(2) Claim 12, line 5, after "wherein", delete "the relative amount of inorganic oxide to polymeric crosslinking agent is from 500:1 to 15:1 and".

(3) Claim 12, line 10, after "basis" and before ".", insert "and wherein the functional groups in the crosslinking agent react with hydroxyl groups on the inorganic oxide to form in the case of alumina Si-O-Al bonds or in the case of silica Si-O-Si bonds".

(4) Claim 15, line 9, after "basis" and before ".", insert "and wherein the functional groups in the crosslinking agent react with hydroxyl groups on the inorganic oxide to form in the case of alumina Si-O-Al bonds or in the case of silica Si-O-Si bonds".

(5) Cancel claim 16.

2. Authorization for this examiner's amendment was given in telephone interviews with Chris Konkol on 8/18/04 and 8/19/04.

Statement of Reasons for Allowance

3. The present claims are allowable over the "closest" prior art Yasuda et al. (U.S. 5,213,873) for the following reasons:

Yasuda et al. disclose coating composition for forming coating on a support for use in ink jet printing wherein the composition comprises liquid medium having dispersed therein 40-80% silica, 15-40% binder including polyvinyl alcohol, and 5-20% cationic polymeric material, i.e. polymeric crosslinking agent. However, given the polymeric crosslinking agent disclosed by Yasuda et al., there is no disclosure or suggestion in Yasuda et al. that the functional groups in the crosslinking agent react with hydroxyl groups on the silica to form Si-O-Si bonds as required in all the present claims. Further, it is calculated that the ratio of silica to polymeric crosslinking agent is 2:1 to 16:1 which is in direct contrast to present claims 12 and 15 which each require ratio of silica to polymeric crosslinking agent of 20:1 to 250:1.

Thus, it is clear that Yasuda et al. do not disclose or suggest the present invention.

Upon updating the searches, a new reference came to the attention of the examiner, namely, Sekiguchi (U.S. 6,485,812).

Sekiguchi discloses coating composition for forming coating on a support for use in ink jet printing wherein the composition comprises liquid medium having dispersed therein 100 parts silica or alumina, 2-50 parts binder including polyvinyl alcohol, and 0.05-5 parts polymeric crosslinking agent obtained from tetraalkoxytitanium which reacts with the hydroxyl groups on the surface of the silica or alumina. However, given the

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polymeric crosslinking agent disclosed by Sekiguchi, there is no disclosure or suggestion in Sekiguchi that the functional groups in the crosslinking agent react with hydroxyl groups on the silica to form Si-O-Si bonds or with hydroxyl groups on the alumina to form Si-O-Al bonds as now required in all the present claims (see paragraph 1 of the attached examiner's amendment).

Thus, it is clear that Sekiguchi does not disclose or suggest the present invention.

In light of the above, the present claims are passed to issue.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho
Primary Examiner
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CS
8/20/04